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10/781,607	02/18/2004	Maria Guadalupe Castellanos	200310995-1	2695

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HEWLETT PACKARD COMPANY  
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INTELLECTUAL PROPERTY ADMINISTRATION  
FORT COLLINS, CO 80527-2400

EXAMINER
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LONG, FONYA M

ART UNIT	PAPER NUMBER
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3689

NOTIFICATION DATE	DELIVERY MODE
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03/03/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<i>Office Action Summary</i>	Application No.	Applicant(s)	
	10/781,607	CASTELLANOS, MARIA GUADALUPE	
	Examiner	Art Unit	
	FONYA LONG	3689	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2008.
- 2a) ☒ This action is FINAL.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-13, 16, 17, 19-21, 23 and 27-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13, 16, 17, 19-21, 23 and 27-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

This communication is a Final Office Action on the merits. Claims 1-3, 6, 8-13, 15, 17, 19-21, and 23 have been amended. Claims 14, 18, 22, and 24-26 have been canceled. Claims 27-36 have been added. Claims 1-13, 16, 17, 19-21, 23, and 27-36 are currently pending and have been addressed below.

### *Claim Rejections - 35 USC § 101*

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1-10 and 27-30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. In order for a method to be considered a "process" under §101, a claimed process must either: (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials). *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972). If neither of these requirements is met by the claim, the method is not a patent eligible process under §101 and is non-statutory subject matter. With respect to claims 1-10 and 27-30, the claim language does not include the required tie or transformation and thus is directed to nonstatutory subject matter.

Examiner recommends placing the "processor" limitation into the method steps claimed in addition to the preamble of the claims.

*Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-7, 9-13, 15, 16, 19-21, 23, 30, 33, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soderland (1999) in view of Grundfest (US 2002/0165726).

As per Claims 1 and 19, Soderland discloses a method executed by a processor, comprising:

receiving a definition of plural structural components within a document being analyzed (Page 238, discloses defining (via identifying) the context of relevant phrases (i.e. components) and the exact delimiters (i.e. structural) of the phrases (i.e. components));

determining at least one language pattern indicative of a document attribute from text of a plurality of sample document, wherein the at least one language pattern corresponds to a particular one of the plural structural components specified by the definition (Page 238, via WHISK rules that are based on a form of regular expression patterns that identify the context of relevant phrases and the exact delimiters of those phrases);

determining whether the language pattern is present in the particular structural component of the contract being analyzed (Pages 238-239, discloses determining whether a language pattern is present in a document);

in response to the presence of the language pattern in the particular structural component of the document being analyzed, assigning text associated with the language pattern to the contract attribute (Page 239, via if the entire pattern matches, a case frame is created with slots filled as labeled in the output portion of the rule).

However, Soderland fails to explicitly disclose the method being applied to contracts.

Grundfest discloses a system and method for facilitating creation and management of contractual relationships and corresponding contracts with the concept of analyzing contracts for language patterns ([0010] discloses searching through contracts for trends or patterns in the contract data).

Therefore, from the teaching of Grundfest, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the information extraction system of Soderland to include the method being applied to contracts as taught by Grundfest in order to aid in recognizing contractual patterns such as price and quantity in contract that may identify marketing and sales opportunities in contracts for goods and services.

As per Claims 2 and 20, Soderland discloses the claimed invention as applied to Claims 1 and 19, above. However, Soderland fails to explicitly disclose identifying,

Art Unit: 3689

from the plurality of sample contracts, annotations that describe a structural context associated with the language pattern.

Grundfest discloses a system and method for facilitating creation and management of contractual relationships and corresponding contracts with the concept of identifying, from the plurality of sample contracts, annotations that describe a structural context associated with the language pattern, wherein the structural context corresponds to the particular structural component ([0036] discloses using XML (extensible markup language) tagging (i.e. annotations) to extract relevant data from the full text of contracts entered into the database).

Therefore, from the teaching of Grundfest, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the information extract system of Soderland to include identifying, from the plurality of contracts, annotations that describe a structural context associated with the language pattern as taught by Grundfest in order to aid in recognizing contractual patterns such as price and quantity in contracts that may identify marketing and sale opportunities in contracts for goods and services.

As per Claims 3 and 21, Soderland discloses the claimed invention as applied to Claims 2 and 20, above. However, Soderland fails to explicitly disclose manually adding the annotations to the plurality of contracts.

Grundfest discloses a system and method for facilitating creation and management of contractual relationships and corresponding contracts with the concept of manually adding the annotations to the plurality of sample contracts based on the

Art Unit: 3689

plural structural components specified by the definition ([0036] discloses using XML (extensible markup language) tagging (i.e. annotations) to extract relevant data from the full text of contracts entered into the database).

Therefore, from the teaching of Grundfest, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the information extract system of Soderland to include manually adding the annotations to the plurality of contracts as taught by Grundfest in order to aid in recognizing contractual patterns such as price and quantity in contracts that may identify marketing and sales opportunities in contracts for goods or services.

As per Claim 4, Soderland discloses the claimed invention as applied to Claims 2 and 20, above. However, Soderland fails to explicitly disclose extensible markup language tags.

Grundfest discloses a system and method for facilitating creation and management of contractual relationships and corresponding contract with the concept of extensible markup language tags ([0036] discloses using XML (extensible markup language) tagging (i.e. annotations) to extract relevant data from the full text of contracts entered into the database).

Therefore, from the teaching of Grundfest, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the information extract system of Soderland to include extensible markup language tags as taught by Grundfest in order to aid in recognizing contractual patterns such as price and quantity

Art Unit: 3689

on contracts that may identify marketing and sale opportunities in contracts for goods or services.

As per Claim 5, Soderland discloses the contract attribute being specified in a component object model associated with the contract (Pages 234-235, discloses using domain objects such as person names, company names, positions (i.e. attributes) that are associated with the document).

As per Claims 6 and 23, Soderland discloses generating a rule having an identifier of the particular structural component and a regular expression associated with the language pattern (Page 238, via WHISK rules being based on a form of regular expression language patterns that identify the context of relevant phrases (i.e. components) and the exact delimiters of those phrases (i.e. structural components)).

As per Claim 7, Soderland discloses the regular expression being formed using a top-down induction method (Page 244, discloses using top-down rule induction method wherein it begins with an “empty” rule that covers all instances, then adds terms to the rule, which reduces the number of instances covered monotonically).

As per Claim 9, Soderland discloses classifying a portion of the contract being analyzed containing the language pattern into a subject category associated with the particular structural component of the rule (Pages 239-240, discloses classifying a portion of an ad containing the language pattern for bedrooms and neighborhood into a subject category associated with the structural context component of the rule (i.e. Bdrm or Nghbr)).



As per Claim 10, Soderland discloses classifying into the subject category based on at least one language pattern in the portion indicative of the subject category (Pages 239-240, discloses classifying a portion of an ad containing the language pattern for bedrooms and neighborhood into a subject category associated with the structural context component of the rule (i.e. Bdrm or Nghbr)).

As per Claim 11, Soderland discloses a processor and a learning module configured to determine at least one language pattern indicative of a contract attribute from text of the plurality of contracts (Page 261, discloses a learning system (i.e. WHISK). Page 238, discloses WHISK rules that are based on a form of regular expression patterns that identify the context of relevant phrases (i.e. contract attributes) and the exact delimiters of those phrases); and

an extractor executable on the processor to determine whether the language pattern is present in the particular structural component of the contract being analyzed, the extractor further executable to, in response to the presence of the language pattern in the particular structural component of the contract being analyzed, assign a contract attribute to a portion of the text of the contract being analyzed associated with the language pattern (Page 233, discloses an information extraction system comprising of a set of text extraction rules that identify relevant information to be extracted based on patterns. Page 239, discloses if the entire pattern matches, a case frame is created with slots filled as labeled in the output portion of the rule).

Soderland also discloses definitions that specifies plural structural components of a document being analyzed (Page 238, discloses defining (via identifying) the context of

Art Unit: 3689

relevant phrases (i.e. components) and the exact delimiters (i.e. structural) of the phrases (i.e. components)). However, Soderland fails to explicitly disclose a storage arrangement and a contract facts database.

Grundfest discloses a system and method for facilitating creation and management of contractual relationships and corresponding contracts with the concept of a storage arrangement including a plurality of sample contracts stored in machine-readable form (Fig. 3B (304); [0020], discloses a contract database that contains a plurality of contracts); and a contract facts database configured to store a data value conforming to the portion of the text assigned to the contract attribute (Fig. 3B (304); [0020], discloses a contract database that contains a plurality of contracts).

Therefore, from the teaching of Grundfest, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the information extraction system of Soderland to include a storage arrangement and a contract facts database as taught by Grundfest in order to aid in recognizing contractual patterns such as price and quantity in contracts that may identify marketing and sales opportunities in contracts for goods and services.

As per Claim 12, Soderland discloses the claimed invention as applied to Claim 11, above. However, Soderland fails to explicitly disclose identifying, from the plurality of sample contracts, annotations that describe a structural context associated with the language pattern.

Grundfest discloses a system and method for facilitating creation and management of contractual relationships and corresponding contracts with the concept

Art Unit: 3689

of identifying, from the plurality of sample contracts, annotations that describe a structural context associated with the language pattern and corresponding to the particular structural component in each of the sample contracts ([0036] discloses using XML (extensible markup language) tagging (i.e. annotations) to extract relevant data from the full text of contracts entered into the database).

Therefore, from the teaching of Grundfest, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the information extract system of Soderland to include identifying, from the plurality of sample contracts, annotations that describe a structural context associated with the language pattern as taught by Grundfest in order to aid in recognizing contractual patterns such as price and quantity in contracts that may identify marketing and sales opportunities in contracts for goods or services.

As per Claim 13, Soderland discloses the claimed invention as applied to Claim 12, above. However, Soderland fails to explicitly disclose manually adding annotations to the plurality of contracts.

Grundfest discloses a system and method for facilitating creation and management of contractual relationships and corresponding contracts with the concept of manually adding the annotations, according to the plural structural components specified by the definition, to the plurality of sample contracts ([0036] discloses using XML tagging (i.e. annotations) to extract relevant data from the full text Of contracts entered into the database).

Therefore, from the teaching of Grundfest, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the information extract system of Soderland to include manually adding the annotations to the plurality of contracts as taught Grundfest in order to aid in recognizing contractual patterns such as price and quantity in contracts that may identify marketing and sales opportunities in contracts for goods and services.

As per Claim 15, Soderland discloses generating a rule having an identifier of the particular structural component and a regular expression associated with the language pattern (Pages 238-239, discloses using WHISK rules for structured and semi-structured text wherein the rules are based on a form of regular expression patterns that identify the context of relevant phrases and the exact delimiters (i.e. identifier) of those phrases).

As per Claim 16, Soderland discloses the regular expression being formed using a top-down induction method (Page 244, discloses using top-down rule induction method wherein it begins with an "empty" rule that covers all instances, then adds terms to the rule, which reduces the number of instances covered monotonically)

As per Claims 30, 33, and 36, Soderland discloses determining a second language pattern indicative of a second document attribute from text of the plurality of documents, wherein the second language pattern corresponds to a second one of the plural structural components specified by the definition (Page 238-239, discloses WHISK rules that are based on a form of regular expression patterns that identify the context of relevant phrases and the exact delimiters of those phrases and defining (via

Art Unit: 3689

identifying) the context of relevant phrases (i.e. components) and the exact delimiters (i.e. structural) of the phrases (i.e. components), wherein the rule is re-applied to identify additional pattern matching language located in a document);

determining whether the second language pattern is present in the second structural component of the document being analyzed (Pages 238-239, discloses determining whether a language pattern is present in a document); and

extracting text to assign to the second document attribute from the second structural component of the document being analyzed in response to determining the second language pattern is present (Pages 259-260, discloses extracting phrases and text styles from a document).

However, Soderland fails to explicitly disclose the method and system being applied to contracts.

Grundfest discloses a system and method for facilitating creation and management of contractual relationships and corresponding contracts with the concept of analyzing contracts for language patterns ([0010] discloses searching through contracts for trends or patterns in the contract data).

Therefore, from the teaching of Grundfest, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the information extraction system of Soderland to include the method being applied to contracts as taught by Grundfest in order to aid in recognizing contractual patterns such as price and quantity in contract that may identify marketing and sales opportunities in contracts for goods and services.

Art Unit: 3689

5. Claims 8, 27-29, 31, 32, 34, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soderland (1999) in view of Grundfest (US 2002/0165726) as applied to claim 1, 11, and 19 above, and further in view of Lerner et al. (6,859,909).

As per Claim 8, the Soderland and Grundfest combination discloses the claimed invention as applied to Claim 1, above. However, the combination fails to explicitly disclose a document object model.

Lerner et al. discloses a system and method for annotating web-based documents with the concept of a document object model (Col. 7, Line 47-Col. 8, Line 11, discloses a document object model which is a language-neutral specification that allows programs and scripts to access and update the content, structure and style of documents).

Therefore, from the teaching of Lerner et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Soderland and Grundfest combination to include a document object model as taught by Lerner et al. in order to aid in providing an effective means to annotate a document such as a contract.

As per Claims 27-29, 31, 32, 34, and 35, Soderland discloses receiving the definition of the plural structural components wherein the particular structural component is present in at least some of the sample documents ((Page 238, discloses defining (via identifying) the context of relevant phrases (i.e. components) and the exact delimiters (i.e. structural) of the phrases (i.e. components), wherein the structural phrases are present in Rental ads); and wherein receiving the definition of the plural

Art Unit: 3689

structural components comprises receiving the definition of plural sections or clauses within the with a document being analyzed (Page 238-239, via defining the plural sections of the Rental ad being analyzed via the number of bedrooms and associated price).

However, Soderland fails to explicitly disclose the method and system being applied to contracts and a model of the plural structural components.

Grundfest discloses a system and method for facilitating creation and management of contractual relationships and corresponding contracts with the concept of analyzing contracts for language patterns ([0010] discloses searching through contracts for trends or patterns in the contract data).

Therefore, from the teaching of Grundfest, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the information extraction system of Soderland to include the method being applied to contracts as taught by Grundfest in order to aid in recognizing contractual patterns such as price and quantity in contracts that may identify marketing and sale opportunities in contracts for goods and services.

Lerner et al. discloses a system and method for annotating web-based documents with the concept of a model of the plural structural components (Col. 7, Line 47-Col. 8, Line 11, discloses a document object model which is a language-neutral specification that allows programs and scripts to access and update the content, structure, and style of documents).

Therefore, from the teaching of Lerner et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Soderland and Grundfest combination to include a model of the plural structural components as taught by Lerner et al. in order to aid in providing an effective means to annotate a document such as a contract.

6. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Soderland (1999) in view of Grundfest (US 2002/0165726) as applied to claim 11 above, and further in view of Kadel, JR. et al. (US 2002/0184401).

The Soderland and Grundfest combination discloses the claimed invention as applied to Claim 11, above. However, the combination fails to explicitly disclose a relational database and an extensible markup language database.

Kadel, JR. et al. discloses an extensible information system with the concept of a relational database and an extensible markup language database ([0085] discloses the system having a relational database and extensible markup language (XML) databases).

Therefore, from the teaching of Kadel, JR. et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Soderland and Grundfest combination to include a relational database and an extensible markup language database as taught by Kadel, JR. et al. in order to aid in identifying relationships between documents.



*Response to Arguments*

7. Applicant's arguments filed on December 23, 2008 have been fully considered but they are not persuasive.

As per Claims 1, 11, 19, and 27-36, Applicant argues that the Soderland and Grundfest combination fails to disclose receiving a definition of plural structural components within a contract being analyzed, and determining at least one language pattern indicative of a contract attribute from text of a plurality of sample contracts, where the at least one language pattern corresponds to a particular one of the plural structural components specified by the definition. Examiner asserts that the arguments are based on newly added claim limitations. Examiner has addressed these arguments in the rejection stated above based on the newly claimed limitations.

*Conclusion*

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 3689

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 3689

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to FONYA LONG whose telephone number is (571)270-5096. The examiner can normally be reached on Mon-Thur 7:30am-6:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janice Mooneyham can be reached on (571) 272-6805. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/F. L./

Examiner, Art Unit 3689

/Tan Dean D. Nguyen/

Primary Examiner, Art Unit 3689

2/26/09

Application/Control Number: 10/781,607  
Art Unit: 3689

Page 19